



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,119	03/15/2004	Carsten Neumann	NEUMANN C 1	9186
7590 COLLARD & ROE, P.C. 1077 Northern Boulevard Roslyn, NY 11576-1696				
			EXAMINER WOODALL, NICHOLAS W	
			ART UNIT 3733	PAPER NUMBER
			MAIL DATE 06/23/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/801,119

**Applicant(s)**

NEUMANN, CARSTEN

**Examiner**

Nicholas Woodall

**Art Unit**

3733

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 6, 8-10, 12, 13, 17-19 and 21-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8-10, 12, 13, 17-19 and 21-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/07/2008 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5, 6, 8-10, 17, 18, and 21-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paponneau (U.S. Publication 2003/0176925) in view of Yeh (U.S. Patent 6,730,088) and Strnad (U.S. Patent 6,296,665).

Paponneau discloses a device comprising an implant body and a joining plate having an outside contour projecting beyond an outside contour of the implant body and is releasably connected with a free end of the implant body in a substantially perpendicular alignment relative to the longitudinal axis of the implant body by an attachment means, wherein the device is inserted between adjacent vertebrae of the spinal column as a substitute for an intervertebral disc. The joining plate has a thickness

and includes an opening adapted to an outside contour of the device formed to be in the center of gravity of the joining plate, a plurality of openings, a ridge disposed around the plurality of passage openings, and cutting blades on the side facing the vertebra. The attachment means are formed by a plug-in connection formed between the joining plate and at the implant body, wherein a groove is formed in the joining plate and retaining clip formed in the free end of the implant body. The sides of the joining plate are oriented at an incline relative to the longitudinal axis up to 5 degrees in flexion, extension, or lateral bending. Paponneau fails to disclose the device further comprising an implant body including a first implant part, a second implant part, and a threaded ring coupled to the second implant part, the device comprising an angle adjustment mechanism between the joining plate and the implant body, the plurality of passage openings extending to an outer edge of the joining plate, joining plate having a star-shape, the opening of the joining plate being configured outside the center of gravity of the joining plate, the joining plate having a thickness corresponding to between 2% and 30% of the height of the implant body, the surface of the joining plate facing the vertebra having a convex shape, and the grooves of the plug-in connection being on the implant body. Yeh teaches a device comprising an implant body including a first implant part, a second implant part, and a threaded ring comprising a beveled wheel gear connected to the second implant part, wherein the first implant part includes threads engaged with the threaded ring and comprising an angle adjustment mechanism between a joining plate and the implant parts, wherein the angle adjustment mechanism comprising a plurality of ridges and catch seats along the engaged surfaces in order to allow the device to be

axially adjustable and to adjust the angle between the joining plate and the implant parts. Strnad teaches a device comprising a joining plate wherein at least one of the plurality of passage openings extend to an outer edge of the joining plate in order to facilitate bone growth (column 3 lines 62-62). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Paponneau wherein the implant body further comprises a first implant part, a second implant part, and a threaded ring and the device further comprising an angle adjustment mechanism in view of Yeh and the plurality of passage openings extending to an outer edge of the joining plate in view of Strnad in order to allow the device to be axially adjustable, to adjust the angle between the joining plates and the implant parts, and to facilitate bone growth. Regarding the opening of the joining plate being configured outside the center of gravity of the joining plate, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the opening of the joining plate outside of the center of gravity of the joining plate, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. Regarding the thickness of the joining plate corresponding to between 2% and 30% of the height of at least one of the implant parts and the catch seats of the angle adjustment means being separated by a distance between 10 degrees to 45 degrees, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the joining plate a thickness corresponding to between 2% and 30% of the height of at least one of the implant parts and the catch seats of the angle adjustment means being separated by a distance

between 10 degrees and 45 degrees, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233. Regarding the joining plate having a star-shape and the surface of the joining plate facing the vertebrae to have a convex shape, it would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to provide the joining plate with a star-shape and the surface of the joining plate facing a vertebrae having a convex shape, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a joining plate and a surface. In re Dailey and Eilers, 149 USPQ 47 (1966). Regarding the groove of the plug-in attachment means being located on the free end of the implant parts, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the groove of the plug-in attachment means on the free end of the implant parts, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167.

4. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paponneau (U.S. Publication 2003/0176925) in view of Yeh (U.S. Patent 6,730,088) further in view of Strnad (U.S. Patent 6,296,665) further in view of Bucher (U.S. Patent 6,171,059).

The combination of Paponneau as modified by Yeh as further modified by Strnad discloses the invention as claimed except for attachment means comprising a groove in

the free end of the implant bodies and further comprising a spring mounted in a groove in an opening formed in the joining plate. The combination of Paponneau as modified by Yeh as further modified by Strnad discloses a device comprising an attachment means including a groove located on the joining plate and a retaining clip located on the free end of the implant parts in order to attach the two components together. Bucher teaches a device comprising an attachment means comprising a groove located in a first component and a spring mounted in a groove in an opening of the second component in order to attach the two components together. Because both the combination of Paponneau as modified by Yeh as further modified by Strnad and Bucher teach devices comprising attachments means, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute one attachment means for the other in order to achieve the predictable results of attaching the two components together.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-3, 5, 6, 8-10, 12, 13, 17-19, and 21-29 have been considered but are moot in view of the new ground(s) of rejection. The applicant's argument that the star-shaped joining plate is not an obvious matter of design choice is not persuasive. As stated in the previous office action, the rejection states ... since applicant has not disclosed that such solve any stated problem ***or is anything more than one of numerous shapes or configurations*** a person ordinary skill in the art would find obvious (emphasis added by the examiner)... then the star-shaped joining plate would be obvious to one having ordinary skill in the art. The

Art Unit: 3733

applicant discloses numerous shapes and configurations regarding the outer contour of the joining plate in the disclosure of the applicant, which shows that the shape of the joining plate is not critical to the functionality of the device and is nothing more than one of the numerous shapes or configurations presented by the applicant.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Woodall whose telephone number is (571)272-5204. The examiner can normally be reached on Monday to Friday 8:00 to 5:30 EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nicholas Woodall/

Examiner, Art Unit 3733

/Eduardo C. Robert/

Supervisory Patent Examiner, Art Unit 3733